PATENT COOP From the INTERNATIONAL SEARCHING AUTHORITY	ERATION TREATY
То:	PCT P23634PCT
100011 22/F, Great Eagle Centre, 23 Harbour Road, Wanchai, HONG KONG, P.R. China CHINA PATENT AGENT (H.K.) LTD	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY,OR THE DECLARATION
	(PCT Rule 44.1)
	Date of mailing (day/month/year) 2007 (2 5 · 0 1 · 2 0 0 7)
Applicant's or agent's file reference FPEL06150019	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/CN2006/000545	International filing date (day/month/year) 29 Mar. 2006 (29.03.2006)
Applicant INTEL CORPORATION ET-AL	
International search report. Where? Directly to the International Bureau of WI 1211 Geneva 20, Switzerland, Facsimile No For more detailed instructions, see the notes on the 2. The applicant is hereby notified that no international search 17(2)(a) to that effect and the written opinion of the International search 17(2)(a) to that effect and the written opinion of the International search 17(2)(a) to the protest against payment of (an) additing the protest together with the decision thereon has applicant's request to forward the texts of both the prodection of the protest; the applicant wishes to avoid or postpost application, or of the priority claim, must reach the Internation respectively, before the completion of the technical preparation. The applicant may submit comments on an informal basis of the International Bureau. The International Bureau will send international preliminary examination report has been or is to the public but not before the expiration of 30 months from the Within 19 months from the priority date, but only in respect preliminary examination must be filed if the applicant wishes the priority date(in some Offices even later); otherwise, the app prescribed acts for entry into the national phase before those define the separation of 30 months.	with. ims of the international application (see Rule 46): is is normally two months from the date of transmittal of the PO, 34 chemin des Colombettes 5.: +41 22 740 14 35 accompanying sheet. the report will be established and that the declaration under Article national Searching Authority are transmitted herewith. Identificational Fee(s) under Rule 40.2, the applicant is notified that: Identificational Bureau together with the rotest and the decision thereon to the designated Offices. In policiant will be notified as soon as a decision is made. The international application will be published by the me publication, a notice of withdrawal of the international nal Bureau as provided in Rules 90bis.1 and 90bis.3, one for international publication. In the written opinion of the International Searching Authority to a copy of such comments to all designated Offices unless an be established. These comments would also be made available to priority date. In the formal of the international phase until 30 months from the priority date, perform the esignated Offices. It of some designated Offices, a demand for international to postpone the entry into the national phase until 30 months from the priority date, perform the esignated Offices. It is (or later) will apply even if no demand is filed within 19 In policiable time limits, Office by Office, see the PCT Applicant's
Name and mailing address of the ISA/	Authorized officer
The state Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088	SUREZIQUING
Facsimile No. 86-10-62019451	Telephone No. (86-10)62086084

Facsimile No. 86-10-62019451 Form PCT/ISA/220 (January 2004)

(Sae notes on occompanying sheet)

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Applicant's Guide*, a publication of WIPO.

In these Notes, "Article," "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report and the written opinion of the International Searching Authority, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only (see *PCT Applicant's Guide*, Volume I/A, Annexes B1 and B2).

The attention of the applicant is drawn to the fact that amendments to the claims under Article 19 are not allowed where the International Searching Authority has declared, under Article 17(2), that no international search report would be established (see PCT Applicant's Guide, Volume I/A, paragraph 296).

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Preliminary Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When? Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How? Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- 1. [Where originally there were 48 claims and after amendment of some claims there are 51]: "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
 - claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- 2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
 - "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 - "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
 - "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]:
 - "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under Article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

If a demand for international preliminary examination is made, the written opinion of the International Searching Authority will, except in certain cases where the International Preliminary Examining Authority did not act as International Searching Authority and where it has notified the International Bureau under Rule 66.1bis(b), be considered to be a written opinion of the International Preliminary Examining Authority. If a demand is made, the applicant may submit to the International Preliminary Examining Authority a reply to the written opinion together, where appropriate, with amendments before the expiration of 3 months from the date of mailing of FormPCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later (Rule 43bis.1(c)).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see the PCT Applicant's Guide, Volume II.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of Tra	nsmittal of International Search Report				
FPEL06150019	ACTION (Form PCT/ISA/220) a	s well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year)	(Earliest)Priority date (day/month/year)				
PCT/CN2006/000545	29 Mar. 2006 (29.03.2006)					
Applicant						
INTEL CORPORATION ET-AL						
This international search report has been prep to Article 18. A copy is being transmitted to the	•	y and is transmitted to the applicant according				
This international search report consists of a	total of 4 sheets.					
☐ It is also accompanied by a copy of	each prior art document cited in this report.					
1. Basis of the report						
a. With regard to the language, the inter	national search was carried out on the basis of	f:				
the international application in the	language in which it was filed					
a translation of the international app	plication into	, which is the language of a translation				
furnished for the purposes of international	al search (Rules 12.3(a) and 23.1(b))					
b. With regard to any nucleotide ar	nd /or amino acid sequence disclosed in the	international application, see Box No. I.				
2. Certain claims were found unsea	rchable (see Box No. II).					
3. Unity of invention is lacking (see						
4. With regard to the title,						
the text is approved as submitted by	by the applicant.					
the text has been established by the	is Authority to read as follows:					
	NO DOCE	KETING REQUIRED N.A.				
5. With regard to the abstract,						
the text is approved as submitted by	y the applicant.					
the text has been established, accor	rding to Rule 38.2(b), by this Authority as it a	ppears in Box IV. The applicant may, within				
one month from the date of mailing	of this international search report, submit co	mments to this Authority.				
6. with regard to the drawings,						
a. The figure of the drawings to be publish	ned with the abstract is Figure No. 4					
as suggested by the applicant.		. *				
	ecause the applicant failed to suggest a figure ecause this figure better characterizes the inve					
	-					
b. none of the figures is to be publishe	d with the abstract.					

International application No.

	INTERNATIONAL SEARCH REI	PORT	International app	ncation No. CN2006/000545
A CLASI	SIFICATION OF SUBJECT MATTER			
	See e	extra sheet		
	to International Patent Classification (IPC) or to both DS SEARCHED	national classification and	a IPC	
	locumentation searched (classification system followe	d by alacsification symbo	ale)	
Minimum d	IPC: H04L12		710)	
Documen	ntation searched other than minimum documentation to	o the extent that such doc	cuments are include	ed in the fields searched
	lata base consulted during the international search (na DOC, PAJ, CNPAT, CNKI: PROTOCOL, FR REWARD+, SERVER, TFTP, ADJ	EEDBACK, OPTIMI	Z+、SELECT+、	CHOOS+, CHOSEN
C. DOCU	MENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	appropriate, of the relevan	nt passages	Relevant to claim No.
Y	CN1402494A (UNIV QINGHUA) 1 Page7,		2003),	1-20
Y	US7013238B1 (MICROSOFT CORP) Column		3.2006),	1-20
A	CN1659800A (BAO G) 24 Aug the whole desc			1-20
[] Furthe	er documents are listed in the continuation of Box C.	See patent family an	inex.	
"A" docum consid "E" earlier interna "L" docum which	ial categories of cited documents: nent defining the general state of the art which is not ered to be of particular relevance application or patent but published on or after the ational filing date ent which may throw doubts on priority claim (S) or is cited to establish the publication date of another n or other special reason (as specified)	or priority date a cited to understa invention "X" document of pa cannot be conside an inventive step "Y" document of pa	and not in conflict and the principle articular relevance ared novel or cannot p when the docum articular relevance	the claimed invention
other n	ent referring to an oral disclosure, use, exhibition or neans ent published prior to the international filing date	cannot be considered to invol document is combined with o documents, such combination skilled in the art		more other such
	er than the priority date claimed		ber of the same pa	tent family
Date of the a	ctual completion of the international search 23 Dec. 2006 (23.12.2006)	Date of mailing of the	:	
	ling address of the ISA/CN	Authorized officer		
	lectual Property Office, the P.R.China d., Jimen Bridge, Haidian District, Beijing, China	Telephone No. (86-10	SUN Zhiling	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/CN2006/000545

	CN1402494A	12.03.2003	CN1169332C	29.09.2004
	US7013238B1	14.03.2006	NONE	
	CN1659800A	24.08.2005	US2003204615A1	30.10.2003
			WO03094384A2	13.11.2003
			AU2003231193A1	17.11.2003
			EP1508206A2	23.02.2005
			JP2005524330T	11.08.2005
l			EP1657841A2	17.05.2006
			KR20040102198A	03.12.2004
-			TW200406097A	16.04.2004
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2006/000545

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CLASSIFICATION OF SUBJECT MATTER H04L29/06(2006.01)i	
H04L29/06(2006.01)i H04L12/56(2006.01)n	
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Form PCT/ISA /210 (extra sheet) (April 2005)

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHOR	ITY					
		PCT				
100011	(Y-1 Dood		101			
22/F,Great Eagle Centre, 23 I Wanchai, HONG KONG, P.	R.China	WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY				
CHINA PATENT AGENT (H.K.) LTD	(PCT Rule 43 bis.1)				
		Date of mailing				
		1	07 (25 · 01 · 20 0 7)			
Applicant's or agent's file reference		FOR FURTHER ACTION				
FPEL06150019			see paragraph 2 below			
International application No.	International filing de	•	Priority date (day/month/year)			
PCT/CN2006/000545	29 Mar. 2006	(29.03.2006)				
International Patent Classification (IPC) or l	ooth national classificati	on and IPC				
	See suppler	mental box				
Applicant	INTEL CORPO	RATION ET-AL				
This opinion contains indications relat	ing to the following iter	ns:				
This opinion contains indications relat Box No. I Basis of the opini		•••				
☐ Box No.II Priority						
		d to novelty, inventive	step and industrial applicability			
Box No. IV Lack of unity of i	nvention	Vi)with regard to nove	lty, inventive step or industrial applicability;			
	anations supporting suc		ny, mvonitvo otop or madoma, approacimy,			
Box No.VI Certain document	s cited					
Box No. VII Certain defects in the international application						
Box No.VIII Certain observation	Box No.VIII Certain observations on the international application					
2. FURTHER ACTION						
International Preliminary Examining A Authority other than this one to be the IP written opinions of this International Sea	Authority ("IPEA") exc PEA and the chosen IPE arching Authority will n	A has notified the Inte of be so considered.	considered to be a written opinion of the ot apply where the applicant chooses an mational Bureau under Rule 66.1 bis(b) that			
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.						
For further options, see Form PCT/ISA/2	For further options, see Form PCT/ISA/220.					
2 For South on details age notes to Form DCT	TO SEE A SEE SEE SEE SEE SEE SEE SEE SEE S					
3. For further details, see notes to Form PCT/ISA/220.						
Name and mailing address of the ISA/CN	Date of completion o	f this opinion	Authorized officer			
The State Intellectual Property Office, the	23 Dec. 2006		SUN Zhiling			
P.R.China 6 Xitucheng Rd., Jimen Bridge,						

Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451 Telephone No. 86-01-62086084

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CN2006/000545

translation he claimed
he claimed
een filed or that in the
:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CN2006/000545

	s supporting such statemen	gard to novelty, inventive step or ind t	
. Statement:			
Novelty (N)	Claims	1-20	YES
•	Claims	NONE	NO NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

Citations and explanations

The invention relates to optimization of network protocol options by reinforcement learning and propagation. The following documents cited in this report are considered to be the related prior art.

D1:(CN1402494A), which discloses a method for selecting transmission protocol based on client terminal feedback.

D2:(US7013238B1), which discloses an item recommendation method in computer system.

D3:(CN1659800A), which discloses a packet transmitting apparatus for wireless communication application.

About the novelty:

D1, D2, D3 don't disclose all the features of independent claims 1,8,15. So the solutions of independent claims 1,8,15 meet the requirements of Article 33 (2) PCT and have the novelty. Therefore the dependent claims 2-7,9-14,16-20 also meet the requirements of Article 33 (2) PCT.

About the inventive step:

For the independent claim 1, D1 is regarded as being the closest prior art to the present invention, which discloses (see page 7,8 in D1): The server initiates a test packet and sends the test packet to clients. The client collects and analyzes the result of the test, and sends the feedback information to the server. The server selects the corresponding transmission protocol according to the feedback information of the client and sends the selected result to the client. The server and the client both configure the information of the network interface according to the transmission protocol of the selected result. According to the transmission protocol of the selected result the server sends the packet to the client. The different characters compared with claim 1 in D1 are that:the learning component, and conducting by the learning component different trials of one or more options in different states for network communication via a protocol of the network. But the above features have been disclosed by D2 (see column 4 in D2): the system adjusts its internal parameters based on the feedback after a sufficient number of iterations. It is obvious that the person skilled in the art can get the subject matter of claim 1 considering D1 and D2 in combination. So, the solution of claim 1 does not meet the requirements of Article 33 (3) PCT, and does not involve the inventive step.

The additional features of the dependent claims 2-7 can be obtained obviously by the person skilled in the art from the contents taught by D1 (see page 7,8 in D1) and D2 (see column 4 in D2) and these characters well

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CN2006/000545

Supplemental Box:

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

known in the art. Therefore claims 2-7 do not involve an inventive step, and do not meet the criteria set out in Article 33(3) PCT.

For the independent claim 8, D1 is regarded as being the closest prior art to the present invention, which discloses (see page 7,8 in D1): The server initiates a test packet and sends the test packet to clients. The client collects and analyzes the result of the test, and sends the feedback information to the server. The server selects the corresponding transmission protocol according to the feedback information of the client and sends the selected result to the client. The server and the client both configure the information of the network interface according to the transmission protocol of the selected result. According to the transmission protocol of the selected result the server sends the packet to the client. The different characters compared with claim 8 in D1 are that: an option negotiation component, a file transfer component, and adjusting the selection of the one or more options based on the rewards. D2 has disclosed the following features (see column 4 in D2): the system adjusts its internal parameters based on the feedback after a sufficient number of iterations. It is obvious that the person skilled in the art can get the subject matter of claim 8 considering D1 and D2 and the technical features well known in the art. So, the solution of claim 8 does not meet the requirements of Article 33 (3) PCT, and does not involve the inventive step.

The independent claim 15 requests for a system comprising a network environment and a server coupled to the network environment via a network interface, wherein the features included in the server is same to those in the apparatus of claim 8. As the solution of claim 8 does not involve the inventive step, those skilled in the art can obtain the subject matter of claim 15 considering D1 and D2 and the technical features well known in the art. So, the solution of claim 15 does not meet the requirements of Article 33 (3) PCT, and does not involve the inventive step.

The additional features of the dependent claims 9-14,16-20 can be obtained obviously by the person skilled in the art from the contents taught by D1 (see page 7,8 in D1) and D2 (see column 4 in D2) and these characters well known in the art. Therefore claims 9-14,16-20 do not involve an inventive step, and do not meet the criteria set out in Article 33(3) PCT.

About the industrial applicability:

Claims 1-20 have industrial applicability under Article 33(4) PCT, because the technology schemes claimed can be made or used in the industry.

WRITTEN OPINION OF THE

International application No.

INTERNA	ATIONAL SEARC	HING AUTHORI	TY		PCT/CN2006/0005	45
Supplemental Box						
In case the space in any of t	he preceding boxes	is not sufficient.				
Continuation of: Internation	al Patent Classificat	ion (IPC) or both r	national classification	n and IPC		
H04L29/06(2006.01)i H04L12/56(2006.01)n						
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